

IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of the claims in this application.

The text of all pending claims (including any withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

Please AMEND claims 1-9 and ADD new claims 10-16 in accordance with the following:

1. (Currently amended) An apparatus for performing track jumping in consideration of a position of a pickup, the apparatus comprising:

a pickup ~~reading to read~~ to read a signal from an optical disc;
an RF processing unit ~~outputting to generate~~ an error signal controlling to control the pickup by shaping and amplifying the signal ~~transmitted from read by~~ the pickup;
a servo ~~judging to judge~~ to judge a position of the pickup based on the error signal, ~~output from the RF processing unit and outputting generate~~ a track jump start/end-start control signal based on the judged position of the pickup, and generate a track jump end control signal; and
and a driver ~~to start moving the position of the pickup using in response to the track jump start/end-start control signal, and stop moving the pickup in response to the track jump end control signal.~~ output from the servo.

2. (Currently amended) The apparatus of claim 1, wherein: ~~where if the judged position of the pickup judged by the error signal output from the RF processing unit is within a reference range, the servo outputs a predetermined voltage for as the track jump start/end-start control signal to the driver.~~ where if the judged position of the pickup judged by the error signal output from the RF processing unit is within a reference range, the servo outputs a predetermined voltage for as the track jump start/end-start control signal to the driver.

3. (Currently amended) The apparatus of claim ~~1~~ 2, wherein: ~~where if the judged position of the pickup judged by the error signal output from the RF processing unit is not within the reference range, the servo cuts off the predetermined voltage for from being output as the~~ where if the judged position of the pickup judged by the error signal output from the RF processing unit is not within the reference range, the servo cuts off the predetermined voltage for from being output as the

track jump start/end-start control output signal to the driver until the judged position of the pickup is within the reference range.

4. (Currently amended) A method of performing track jumping in consideration of a position of a pickup, the method comprising:

reading a signal from an optical disc with a pickup;

outputting-generating an error signal controlling to control the pickup by shaping and amplifying an optical disc the signal transmitted-read from the optical disc by the pickup;

judging a position of the pickup from-based on the error signal; when a track jump is performed and outputting

generating a track jump start/end-start control signal for the pickup based on the judged position of the pickup;-and

outputting the track jump start control signal to a driver to start moving the position of the pickup;

using-the-generating a track jump start/end-end control signal; and

outputting the track jump end control signal to the driver to stop moving the pickup.

5. (Currently amended) The method of claim 4, wherein:

where-if the judged position of the pickup judged by the error signal is within a reference range, the outputting of the track jump start/end-start control signal comprises outputting a predetermined voltage as the track jump start control signal to the driver; and

where-if the judged position of the pickup judged by the error signal is not within the reference range, the outputting of the track jump start/end-start control signal comprises cutting off the predetermined voltage from being output as the track jump start control signal to the driver until the judged position of the pickup is within the reference range.

6. (Currently amended) An apparatus for performing track jumping of an optical pickup in an optical disc recording/reproducing apparatus, the apparatus comprising:

an RF processing unit generating-to generate a positional error signal based on an output signal of the optical pickup;

a servo ~~judging to judge~~ a position of the optical pickup relative to a track of the optical disc based on the positional error signal, and ~~outputting output~~ a tracking control signal to ~~control for controlling~~ a position of the optical pickup based on the judged position;

a driver ~~controlling to control~~ the position of the optical pickup using the tracking control signal output from the servo; and

a controller ~~monitoring to monitor~~ the tracking control signal, and ~~controlling control~~ the track jumping based on the tracking control signal, wherein:

~~where if~~ the controller determines that the tracking control signal represents indicates that the position of the optical pickup is within a predetermined range of a center of the track, the controller immediately outputs ~~an additional~~ a track jump start control signal to the driver to perform the track jump; and

~~where if~~ the controller determines that the tracking control signal represents indicates that the position of the optical pickup is not within the predetermined range, the controller delays outputting the additional track jump start control signal to the driver until the tracking control signal represents indicates that the position of the optical pickup is within the predetermined range ~~of the track center~~.

7. (Currently amended) The apparatus of claim 6, wherein: ~~after the controller has output the track jump start signal to the driver, the controller calculates an amount of the a target track to be jumped to and sets an output time of a track jump end signal. jump and calculates a duration of the additional voltage based on the calculated amount of the track jump.~~

8. (Currently amended) The apparatus of claim ~~6~~ 7, wherein: the controller ~~removes outputs the additional voltage track jump end signal to the driver when the optical pickup arrives at the target track. has completed the track jump.~~

9. (Currently amended) A method of controlling track jumping of an optical pickup relative to an eccentrically rotating track of an optical disc, the method comprising:

judging whether a position of the optical pickup is within a predetermined range relative to a center of the track at a time of a track jump command;

immediately outputting the track jump command to the optical pickup if the optical pickup is within the predetermined range; and

delaying the outputting of the track jump command to the optical pickup if the optical pickup is not within the predetermined range.

10. (New) The apparatus of claim 1, wherein the track jump start control signal is a kick voltage, and the track jump end control signal is a brake voltage.

11. (New) The method of claim 4, wherein the track jump start control signal is a kick voltage, and the track jump end control signal is a brake voltage.

12. (New) The apparatus of claim 6, wherein the track jump start control signal is a kick voltage, and the track jump end control signal is a brake voltage.

13. (New) The method of claim 9, wherein the delaying of the outputting of the track jump command to the optical pickup if the optical pickup is not within the predetermined range comprises:

delaying the outputting of the track jump command to the optical pickup until the optical pickup is within the predetermined range; and

outputting the track jump command to the optical pickup while the optical pickup is within the predetermined range.

14. (New) The method of claim 9, wherein the track jump command is a kick voltage that is output to a driver of the optical pickup.

15. (New) The method of claim 9, wherein:

the track jump command causes the optical pickup to start moving toward a target track of the optical disc; and

the method further comprises outputting a track jump stop command to the optical pickup when the optical pickup arrives at the target track.

16. (New) The method of claim 15, wherein the track jump stop command is a brake voltage that is output to a driver of the optical pickup.